



Eqs. 1-6 were numerically solved (see Table I—here $c = 30$) using Berkeley Madonna™. The system was initially at steady state for the Basic Model. At day 0 crHIV-1 virus was introduced (initial value was $V_T = 10^5$ virions/mL blood plasma; equivalent to an inoculation of $\sim 5 \times 10^7$ total crHIV-1 virions). Shown here are representative simulations of HIV-1 viral load using $P = 30$ and 3 different D values: $D = 0.4$, $D = 0.2$, and $D = 0.1$ (crHIV-1 viral load is shown for $D = 0.4$). More efficient therapeutic downregulation of HIV-1 expression (i.e. lower D values) increased the time needed to attain the new HIV-1 set point. The inset shows the $D = 0.1$ simulation with the time axis expanded out to years, oscillations persist and are stable.